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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/471,577	12/23/1999	Lester F. Ludwig	VISN-007/03U	7628

7590 09/16/2002

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EXAMINER
ENG, GEORGE

ART UNIT	PAPER NUMBER
2643	

DATE MAILED: 09/16/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.	Applicant(s)
09/471,577	Ludwig
Examiner	**Art Unit**
George Eng	2643

-- ***The MAILING DATE of this communication appears on the cover sheet with the correspondence address*** --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *Mar 12, 2002* .

2a) ☒ This action is **FINAL.** 2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under ***Ex parte Quayle***, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above, claim(s) *4-16* is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-3* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☐ All b) ☐ Some* c) ☐ None of:

1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____
4) ☐ Interview Summary (PTO-413) Paper No(s). _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Response to Amendment

1. This Office action is in response to amendment filed 3/12/2002 (paper no. 15).

Election/Restriction

2. This application contains claims 4-16 drawn to an invention nonelected with traverse in Paper No. 15. A complete reply to the final rejection must include cancelation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground

provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-3 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 5,751,338 (hereinafter Ludwig) in view of U.S. Patent No. 5,382,972 (hereinafter Kannes).

Regarding claim 1, Ludwig discloses a system for providing multimedia telecommunication services to a plurality of multimedia workstations comprising a public digital telephone network, a plurality of user workstation, and a multimedia central office in communication with the public digital telephone network for transceiving audio, video and digital data signals to and from the public digital telephone network to provide multimedia telecommunication services, wherein the multimedia central office being coupled at least one other workstations not associated with the public digital telephone network, i.e., a telephone loop plant (col. 43 line 46 through col. 44 line 6). Ludwig differs from the claimed invention in not specifically teaching the multimedia central office being configured to combine captured video image of at least three users into a mosaic image for reproduction at a workstation of at least one user. However, Kannes teaches a conference system for interactive video, as well as audio, communication including a composite video signal generation means for combining captured video image into a mosaic image for reproduction (figures 4A-4B and

col. 10 line 24 through col. 11 line 44). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Ludwig in having the multimedia central office being configured to combine captured video image of at least three users into a mosaic image for reproduction at a workstation of at least one user, as per teaching of Kannes, because it allows tremendous equipment cost savings.

5. Claims 1-3 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,081,291 (hereinafter Ludwig) in view of U.S. Patent No. 5,382,972 (hereinafter Kannes).

Regarding claim 1, Ludwig discloses a system for providing multimedia telecommunication services to a plurality of multimedia workstations comprising a public digital telephone network, a plurality of user workstation, and a multimedia central office in communication with the public digital telephone network for transceiving audio, video and digital data signals to and from the public digital telephone network to provide multimedia telecommunication services, wherein the multimedia central office being coupled at least one other workstations not associated with the public digital telephone network, i.e., a telephone loop plant (col. 43 line 52 through col. 44 line 6). Ludwig differs from the claimed invention in not specifically teaching the multimedia central office being configured to combine captured video image of at least three users into a mosaic image for reproduction at a workstation of at least one user. However, Kannes teaches a conference system for interactive video, as well as audio, communication including a composite video signal generation

means for combining captured video image into a mosaic image for reproduction (figures 4A-4B and col. 10 line 24 through col. 11 line 44). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Ludwig in having the multimedia central office being configured to combine captured video image of at least three users into a mosaic image for reproduction at a workstation of at least one user, as per teaching of Kannes, because it allows tremendous equipment cost savings.

Claim Rejections - 35 U.S.C. § 112

6. Claims 1-3 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, the term "and/or" is vague and indefinite. Claims 2-3 are also rejected because of depending on claim 1 containing the same deficiency.

Claim Rejections - 35 U.S.C. § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless --
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has

fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

8. Claims 1-3 are rejected under 35 U.S.C. 102(e) as being anticipated by Friedell et al. (US PAT. 5,491,508 hereinafter Friedell).

Regarding claim 1, Friedell disclose a system for providing video communication services (i.e., video conference), comprising a first premises network (i.e., a video conferencing network), a plurality of workstations (10) interconnected by the first premises network and including at least video and audio capture and reproduction capabilities and video sink and display capabilities (figures 1-2 and col. 3 lines 20-41), a multimedia central office (i.e., a local hub 14) in communication with the first premises network for transceiving audio, video and digital data signals originated at or destined for at least one of user workstation to and from the first premises network to provides video communication services (col. 5 lines 33-43 and col. 6 lines 41-59), wherein the local coupled to at least one other workstations associated with a neighboring hub which is not associated with the first premises network of the local hub and configured to combine captured video images of at least three users into a composite image of reproduction at a workstation of at least one user (col. 3 line 58 through col. 4 line 4 and col. 8 lines 10-46).

Regarding claim 2, Friedell teaches that the composite image is a combination of at least one first premises user's image and the image of a user of the other workstation (col. 8 lines 13-17).

Regarding claim 3, Friedell teaches the hub in use to providing aggregation of demand for telecommunication services to groups of subscribers (col. 3 line 58 through col. 4 line 65).

Claim Rejections - 35 U.S.C. § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

10. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ng et al. (US PAT. 5,473,363 hereinafter Ng) in view of Kannes (US PAT. 5,382,972).

Regarding claim 1, Ng discloses a system for providing video communication services comprising a plurality of workstations (i.e., 102-108) interconnected by a first premises network including at least video and audio capture and reproduction capabilities and video sink and display capabilities and a bridge 120 as a multimedia central office in communication with the first premises network for transceiving audio, video and digital data signals originated at or destined for at least one of user workstation to and from the first premises network to provides video communication services, wherein the bridge further being coupled to at least one other workstation (i.e., 110) not associated with the first premises network (figure 1 and col. 2 lines 21-39). Ng differs from the claimed invention in not specifically teaching the multimedia central office being configured to combine captured video image of at least three users into a mosaic image for reproduction at a workstation of at least one user. However, Kannes teaches a conference system for interactive video, as well as audio, communication including a composite video signal generation means for combining

captured video image into a mosaic image for reproduction (figures 4A-4B and col. 10 line 24 through col. 11 line 44). Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Ng in being configured to combine captured video image of at least three users into a mosaic image for reproduction at a workstation of at least one user, as per teaching of Kannes, because it allows tremendous equipment cost savings.

Regarding claim 2, Kannes teaches the mosaic image is a combination of at least one first premises user's image and the image of a user of other workstation (col. 8 lines 22-37).

Regarding claim 3, Ng teaches each bridge coupled to a digital network for processing encoded information including audio video and data, and in use providing aggregation of demand for telecommunication services to groups of subscribers at different premises (col. 2 lines 21-32).

Response to Arguments

11. Applicant's arguments filed 3/12/2002 (paper no. 15) have been fully considered but they are not persuasive.

In response to applicant's argument on double patenting rejection that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., a mosaic of images from a plurality of workstations distributed over a wide area network) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to applicant's argument on 112 2nd paragraph rejection that the phrase "and/or" is appropriate, it appears that the phrase is a function word used to indicate that two words or expressions are being taken together or individually as cited by Applicant (see Remark, page 4). Thus, the phrase clearly has an alternative meaning which does not positively identify the claimed limitation such that it is unclear whether the limitations read as "at least video and audio capture and reproduction capabilities **and** video sink and display capabilities" or "at least video and audio capture and reproduction capabilities **or** video sink and display capabilities". As a result, the claims are rejected under 112 2nd paragraph because it fails to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In response to applicant's argument on Friedell that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the system is implemented in a wide area or public switched network) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

In response to applicant's argument that Friedell fails to teach the multimedia central office transceiving digital data signal. However, Friedell clearly to transport digital signals through the hub's CPU (col. 6 lines 41-59). Note while the claim fails to clearly define how to transceive audio, video and digital data signals. Thus, the broad claimed limitations can still be rejected by Friedell.

In addition, each hub connection with a plurality of workstations can be read as a first premise network, wherein the network connects to the hub which is further connected to another workstations by interconnecting with other hub as shown in figure 1 such that the interconnection between hubs can be determined as public digital network. Furthermore, Friedell clearly teaches the ability of the hub to combine captured video images of at least three users (col. 8 lines 10-47). Therefore, the rejection under USC 102 is maintained.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

In response applicant's argument that neither Ng nor Kannes fails to disclose of a multimedia central office having the connected as claimed, it appears that Ng discloses a backbone structure of the claimed invention comprising a plurality of multimedia central offices, i.e., MCUs. Although Ng, does not specifically teach to combine video images into a mosaic image for reproduction, such limitations are taught by Kannes (see rejection above). The motivation of combining Ng with Kannes is to reduce tremendous equipments cost by using one display means for displaying the mosaic images.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the output of terminals converted to a long distance communication via a switched network) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

13. **Any response to this final action should be mailed to:**

BOX AF

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 308-6306, (for formal communications intended for entry)

Or:

(703) 308-6296 (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to George Eng whose telephone number is (703) 308-9555. The examiner can normally be reached on Tuesday to Friday from 7 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Curtis Kuntz, can be reached on (703) 305-4708.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

GEORGE ENG

Art Unit 2643

STELLA WOO
PRIMARY EXAMINER